Cancer Cluster Investigation Flowchart
New Jersey Department of Health and Senior Services
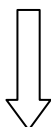## Cancer Epidemiology Services

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Step I—Initial Contact and Response to Inquiries
Purpose: Listen, record, and provide information to person or group reporting possible cancer cluster.*
*Information collected may include case characterization and verification with the NJSCR, review of NJSCR data, AND/OR contact with local and state officials.

Does there appear to be an unusual pattern regarding number and types of cancer, gender, ages at diagnosis, or time trends? Specifically, are there at least 5 cases of one type or related types of an uncommon adult cancer, OR at least 3 cases of one type or related types of childhood cancers? OR is there a plausible reason to suspect more than normal fluctuation of cases? OR are the latency issues potentially consistent with a common factor? OR is community concern high?
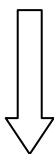
YES

NO ⟹ End investigation. Send customized letter & information (fact sheets, feedback form, etc.). Log inquiry in CSDB with notation of annual follow-up if indicated. Most inquiries end here.

Step II. Formal Standardized Incidence Ratio (SIR) Analysis
Purpose: To determine whether or not an excess of cancer has occurred.

Does SIR analysis show there is an excess of uncommon cancers occurring, i.e. p-value <0.001 for one observation period? OR p-value <0.005 for two consecutive observation periods? OR is there an increasing trend of rates over several time frames of an uncommon cancer? OR is there a plausible hypothesis regarding a particular factor or exposure and an SIR with p <0.05 for any period?

YES

NO ⟹ End investigation. Send customized letter & information (fact sheets, feedback form, a SIR report, etc.). Public education and outreach may be recommended, in coordination with the Local Health Officer. Log inquiry in CSDB with notation of annual follow-up if indicated.

Step III. In-Depth Study
Purpose: Determine need and feasibility of performing an epidemiologic study linking the cancers to an exposure.